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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/770,248

01/29/2001

Osamu Iwasaki

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6831

5514 7590 04/18/2007  
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EXAMINER
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PHAM, THIERRY L

ART UNIT	PAPER NUMBER
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2625

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/18/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 09/770,248	Applicant(s) IWASAKI, OSAMU	
	Examiner Thierry L. Pham	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 4-6 and 14-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-6, 14-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

- This action is responsive to the following communication: RCE filed on 3/12/07.
- Claims 1-3, 7-13 (canceled); claims 4-6, 14-17 (pending).

#### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/12/07 has been entered.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4, 14, and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Limitations/features "extracting encrypted print image data by analyzing a command of print control data into which the encrypted print image data has been converted as a command" as cited in independent claims 4, 14, and 17 are unclear. The examiner is unclear whether the encrypted print image data is extracted "*into*" a command or the encrypted print data is converted "*into*" a command. Appropriate actions and/or clarifications are required. The examiner herein assumes the encrypted print data is converted into a command.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-6, and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiegley (US 6711677), and in view of Lapstun et al (US 2005/0097323).

Regarding claim 4, Wiegley further discloses an image data recording device (printer, fig. 2), comprising:

- common key generating means ("session identifier" generating means for generating a session identifier corresponding to a print session request from the host computer, fig. 3-6, col. 3, lines 63-67 and col. 4, lines 1-20) for generating a common key based on a print ID transferred from an image data processing device;
- management means (session identifier table 40, fig. 8, col. 4, lines 1-20) for managing the common key generated by said common key generating means and the print ID transferred from said image data processing device;
- common key issue means (session identifier issuing means, cols. 3-4) for transmitting the common key (transmitting session identifier to personal computer 12 via network 14, fig. 2) generated by said common key generating means to said image data processing device;
- common key obtaining means (session identifier obtaining means, cols. 3-4) for obtaining the common key corresponding to the print ID (obtaining session identifier previously generated corresponding to a print request from a table, col. 5, lines 4-15) from said management means when the print ID and print control data are transmitted from said image data processing device;
- analyzing means (comparison/analyzing means, fig. 5b, cols. 5-6) for extracting (decryption, col. 2, lines 32-34) encrypted print image data by analyzing (analyzing the received encrypted print data, col. 5, lines 4-47) a command of the print control data into which the encrypted print image data has been converted (encrypted print data itself are command data, for example, encrypted print data sent from the host computer are commands for the printer to print out the data) as a command;
- decryption means (decryption means, fig. 3-6, cols. 5-6) for decrypting the encrypted print image data (personal computer encrypts print data with session identifier and session key, col. 4,

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lines 48-67) extracted by said analyzing means using a key (using an session identifier generated earlier, col. 5, lines 4-24) corresponding to the print ID; and

- print means (printer, fig. 2, abstract and col. 2, lines 30-55) for recording the print image data decrypted by said decryption means on a recording medium;
- wherein the print image data is data encrypted in the image data processing device (printer client encrypts print image data using session identifier, step 114, fig. 3a, fig. 4a, abstract, col. 4, lines 47-67) by using the common key received from said image data recording device (using session identifier generated by printer, fig. 3a and 4a).

Wiegley discloses a management means for managing the common key generated by said common key generating means and print ID transferred from said image data processing device, but fails to expressly teach and/or suggest managing common key and print ID *in pairs*.

Lapstun, in the same field of endeavor for printing, teaches a method for managing common key and print ID in pairs (pars. 7, 13, 17, 369).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made by modifying image recording device of Wiegley to include a method for managing common key and print ID in pairs as taught by Lapstun because of a following reason: (●) it eliminates the risk of replay attacks (col. 1, lines 62-65 as taught Wiegley) and to easily managing the print jobs by implementing common keys and print ID in pairs, for example, it allows an operator to easily search for a print job ID with given a generated common key and/or vice versa. In addition, Wiegley also teaches paring the public/private key with secret session identifier is well known and available in the arts (col. 4, lines 30-66). In other words, pairing between two IDs are well known and widely available in the art and therefore, it would be obvious to modify image recording device of Wiegley to store and managing common key and print ID in pairs.

Regarding claim 5, Wiegley further discloses the apparatus according to claim 4, wherein said common key generating means generates the common key without regularity independent (col. 2, lines 29-54) of a value of the print ID.

Regarding claim 6, Wiegley further discloses the apparatus according to claim 4, wherein said decryption means performs a decryption process using a conversion table (table, fig. 8, col. 4, lines 1-20) generated using said key corresponding to the print ID.

Regarding claims 14-16: Claims 14-16 are the methods corresponding the apparatus and recite limitations that are similar and in the same scope of invention as to those in claims 4-6; therefore, claims 14-16 are rejected for the same rejection rationale/basis as described in claims 4-6 above.

Regarding claim 17: Claim 17 recites limitations that are similar and in the same scope of invention as to those in claim 4 except computer readable memory for storing computer programs. All computers/printers have some type of computer readable medium (i.e. RAM 32, fig. 2) for storing computer programs; hence claim 17 would be rejected using the same rationale as in claim 4.

### ***Response to Arguments***

- Applicant's arguments, see pages 6-7, filed 3/12/07, with respect to the rejection(s) of claim(s) 4, 14, and 17 under 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of previously applied art reference due to newly added features/limitations ("into which the encrypted print image data has been converted as a command") as cited in independent claims 4, 14, and 17.
- Applicant's arguments, see pages 6-7, filed 3/12/07, with respect to claims 4, 14, and 17 have been fully considered and are persuasive. The rejection under U.S.C. 112 2<sup>nd</sup> paragraph of claims 4, 14, and 17 has been withdrawn because features (e.g. without common key) has been deleted from independent claims 4, 14, and 17.

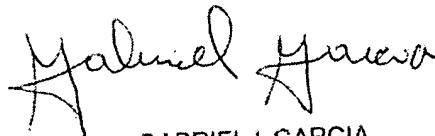
*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L. Pham whose telephone number is (571) 272-7439. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571)272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thierry L. Pham



GABRIEL I. GARCIA  
PRIMARY EXAMINER